

CLAIMS

What is claimed is:

1. A motorcycle having a longitudinal axis extending from a front wheel to a rear wheel, the rear wheel having an axis of rotation, the motorcycle also including a braking system, the braking system comprising:

a disk having a disk axis and a first side disposed proximate an output of a gearbox, wherein the disk rotates about the disk axis;

the disk having a second side opposite the first side, a universal joint being attached to the second side of the disk; and

wherein the disk axis is different than the axis of rotation of the rear wheel.

2. The motorcycle according to claim 1, wherein the direction of the disk axis is substantially similar to the longitudinal axis of the motorcycle.

3. The motorcycle according to claim 1, wherein the disk axis is spaced from the rear axle.

4. The motorcycle according to claim 1, wherein the disk is disposed within a body perimeter of the motorcycle.

5. The motorcycle according to claim 1, wherein the disk qualifies as sprung weight.

6. The motorcycle according to claim 1, wherein a drive shaft adapted to drive the rear wheel is attached to the universal joint.

7. A motorcycle comprising:

a front wheel with a front axle, wherein the front wheel rotates about the front axle,
a rear wheel with a rear axle, wherein the rear wheel rotates about the rear axle, and

a brake system disposed between the front axle and the rear axle, wherein the brake system qualifies as sprung weight.

8. The motorcycle according to claim 7, wherein the brake system includes a disk rotating about a disk axis, the direction of the disk axis being different than the direction of the rear axle.

9. The motorcycle according to claim 7, wherein the brake system includes a disk attached to an output shaft of a gearbox.

10. The motorcycle according to claim 7, wherein the disk is attached to a universal joint, and the universal joint is attached to a drive shaft adapted to drive the rear wheel.

11. The motorcycle according to claim 7, wherein the disk rotates about a disk axis that is similar to the axis of rotation of a drive shaft.

12. The motorcycle according to claim 7, wherein the weight of the disk is supported by the front suspension and the rear suspension.

13. The motorcycle according to claim 7, wherein a rear brake assembly qualifies as sprung weight.

14. The motorcycle according to claim 13, wherein the rear brake assembly includes the disk, and caliper adapted to engage the disk.

15. The motorcycle according to claim 13, wherein the rear brake assembly includes a guard disposed over the disk and adapted to prevent foreign objects from contacting the disk.

16. A motorcycle comprising:

a front wheel, a rear wheel, a frame, a seat and handlebars;
the motorcycle also having a body perimeter; and
a disk adapted to brake the rear wheel, wherein the disk is located within the body
perimeter.

17. The motorcycle according to claim 16, wherein the disk is rotatably associated with a
frame of the motorcycle.

18. The motorcycle according to claim 16, wherein the rear wheel is mounted on a swing arm
assembly that pivots with respect to the disk.

19. The motorcycle according to claim 16, wherein the rear wheel rotates about a rear wheel
axis and wherein the disk rotates about a disk axis, and wherein the disk axis is different than
rear wheel axis.

20. The motorcycle according to claim 16, wherein the rear wheel rotates about a rear wheel
axis and wherein the disk rotates about a disk axis, and wherein the disk axis is spaced from the
rear wheel axis.